### In the Claims:

## 1.-18. (CANCELLED)

19. (**CURRENTLY AMENDED**) An ankle-foot orthosis for resisting plantarflexion of a patient's foot, the orthosis comprising:

a compression stocking formed of contiguous first and second tubular members, said second tubular member being set at an angle to the first tubular member to define, at least in use, a generally L-shaped cavity configured to accept and fit closely about the foot and ankle of the patient; and

a flexible rib of silicone elastomer,

at least a portion of an external surface of a defined region of the compression stocking; said defined region being substantially aligned with at least a portion of the dorsum of the patient's foot when said orthosis is in use; being impregnated with said silicone rib to bond said rib to said defined bonded to a region of the compression stocking, said rib obtained by applying a silicone elastomer to the compression stocking so that the elastomer impregnates at least a portion of the compression stocking and forms, when cured, a bond between the rib and the eompression stocking, such that said rib overlies at least a portion of the dorsum of the patient's foot when said orthosis is in use and has a resilience that is appropriate for resisting the particular degree of plantarflexion experienced by the patient.

20. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 19, wherein said compression stocking is operable to exert a compressive force on said foot and ankle of said patient.

### 21. (CANCELLED)

22. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 19, wherein said compression stocking is woven to provide an elastic stretch in only one direction, said one direction comprising a direction that increases the cross-sectional area of said generally L-shaped cavity.

- 23. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 20, wherein said compressive force is more or less than at least 5 mm Hg (approximately 670 Pascals).
- 24. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 20, wherein different regions of the compression stocking exert different compressive forces on the foot and ankle of the patient.
- 25. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 24, wherein said second tubular member exerts a greater compressive force on the foot than the compressive force exerted on the ankle by the first tubular member.

### 26. (CANCELLED)

- 27. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 19, wherein the resilience of the rib, as between a first orthosis and a second orthosis, may be varied by varying the thickness of the rib of one orthosis as compared to the other.
- 28. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 19, wherein the resilience of the rib, as between a first orthosis and a second orthosis, may be varied by varying the composition of the rib of one orthosis as compared to the other.
- 29. (**PREVIOUSLY PRESENTED**)An orthosis according to Claim 19, wherein the rib is of 35 to 80 shore silicone elastomer.
- 30. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 19, wherein said rib comprises a pair of proximal wings extending from the rib around either side of the ankle of the patient towards the back of the ankle, said wings terminating at the back of the ankle and defining a gap between a terminal end of each wing.

- 31. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 30, wherein said proximal wings extend in parallel to a proximal edge of the elastic structure.
- 32. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 30, wherein said proximal wings have the same resilience or a different resilience to that of the rib.
- 33. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 19, wherein said rib comprises a pair of distal wings extending from the rib around and partly underneath the foot, in the region of the metatarsal heads, towards the plantar aspect of the foot, said wings terminating underneath the foot and defining a gap between a terminal end of each wing.
- 34.( **PREVIOUSLY PRESENTED**) An orthosis according to Claim 33, wherein said distal wings extend generally in parallel to a distal edge of the compression stocking.
- 35. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 33, wherein said distal wings have the same resilience or a different resilience to that of the rib.
- 36. (**PREVIOUSLY PRESENTED**) An orthosis according to Claim 19, wherein said rib comprises a pair of proximal wings extending from the rib towards the back of the ankle of the patient, and further comprises a pair of distal wings extending from the rib, in the region of the metatarsal heads, towards the plantar aspect of the foot.

37. (**CURRENTLY AMENDED**) A method of manufacturing an orthosis for resisting plantarflexion of patient's foot, the method comprising the steps of:

providing a compression stocking formed of contiguous first and second tubular members set at an angle to one another to define, at least in use, a generally L-shaped cavity configured to accept and fit closely about the foot and ankle of a patient;

mounting the compression stocking on a foot-shaped anvil;

preparing a silicone elastomer having a resilience which is appropriate for resisting the particular degree of plantarflexion experienced by the patient;

applying the silicone elastomer directly to <u>at least a portion of an external surface of a defined region of</u> the compression stocking; <u>said defined region being substantially aligned with at least a portion of the dorsum of the patient's foot when the orthosis is in use</u>; such that, the silicone elastomer impregnates <u>and bonds to the defined region of</u> the compression stocking and forms a rib that will, in use, overlie the dorsum of the patient's foot;

curing the silicone elastomer to form a bond between the rib and the compression stocking; and

removing the compression stocking from the anvil.

# 38. (CANCELLED)

- 39. (**PREVIOUSLY PRESENTED**) An ankle foot orthosis according to Claim 29, wherein said rib is of 65 shore silicone elastomer.
- 40. (CURRENTLY AMENDED) The orthosis according to Claim 19, wherein said rib is further obtained by applying the silicone elastomer to the portion of the compression stocking as includes one or more layers of silicone elastomer.
- 41. (**CURRENTLY AMENDED**) The method of Claim 37, further comprising wherein applying the silicone elastomer to the compression stocking as includes applying one or more layers of silicone elastomer.